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10/534,370	10/534,370 07/03/2006 Neil Rideout		59006-8001.US01	2924
22918 PERKINS COI	7590 04/28/201 E LLP	EXAMINER		
P.O. BOX 1208		NGUYEN, MINH CHAU		
SEATTLE, WA	1 98111-1208		ART UNIT	PAPER NUMBER
			2445	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentprocurement@perkinscoie.com

Office Action Summary		Арр	lication No.	Applicant(s)				
		10/5	534,370	RIDEOUT, NEIL				
		Exa	miner	Art Unit				
		MIN	H-CHAU NGUYEN	2445				
Period fo	The MAILING DATE of this communic r Reply	ation appears	on the cover sheet with the c	correspondence ad	ddress			
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Status								
1) 又	Responsive to communication(s) filed	on 01 Decem	ber 2009					
	This action is FINAL . 2b) ☐ This action is non-final.							
′=	Since this application is in condition for	,		osecution as to the	e merits is			
<i>/</i> —	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4) 🖂	Claim(s) <u>1-11,13-16,67-69 and 82-10</u>	1 is/are pendin	g in the application.					
•	4a) Of the above claim(s) is/are		-					
	Claim(s) is/are allowed.							
·	6)⊠ Claim(s) <u>1-11,13-16,67-69 and 82-101</u> is/are rejected.							
· ·	Claim(s) is/are objected to.	_ ,						
·	Claim(s) are subject to restricti	on and/or elec	tion requirement.					
Applicati	on Papers							
	The specification is objected to by the	Evaminer						
-			or h) Objected to by the	Evaminer				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
				. ,	.FR 1 121(d)			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
·	nder 35 U.S.C. § 119	,						
	Acknowledgment is made of a claim fo	or foreign priori	ty under 35 H S C & 110/a)-(d) or (f)				
· .	☐ All b)☐ Some * c)☐ None of:	i loreigh phon	ty under 55 0.0.0. § 115(a)-(u) 01 (1).				
۵,۲	_ ·_ ·_	ocuments have	e been received					
	 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
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Attachmen	t(s)							
	e of References Cited (PTO-892)		4) Interview Summary	(PTO-413)				
2) Notic	e of Draftsperson's Patent Drawing Review (PT	O-948)	Paper No(s)/Mail D	ate				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other:								

DETAILED ACTION

This action is responsive to the amendment of the applicant filed on 12/01/2009. Claims 1-11, 13-16, 67-69, 82-101 are presented for further examination.

Claim Objections

1. Claim 82 is objected to because of the following informalities: claim 82 recites "a machine-readable medium having embodied therein instructions" which does not show the instructions are being stored in the medium. Therefore, it should be changed as "a machine-readable medium storing instructions". Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- Claims 82-94 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
- 3. Independent claim 82 recites "a machine-readable medium having embodied therein instructions". However, in specification, the machine-readable medium includes as any type of storage device that is accessible by the processor and also encompasses a carrier wave that encodes a data signal. Therefore, claim 82 and its dependent claims are directed towards non-statutory subject matter.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-7,9-16,67-69,82,84-88,90-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hales et al. (Hales) (US 6,288,739), and further in view of Lahr (US 7,013,322).
- 5. Claim 1, Hales teaches a method for multicasting data through a network ill realtime: the method comprising the computer-implemented acts of:

multicasting said data (i.e. audio and video data) through said network (i.e. global network 12) using a multicast protocol [figure 1 & 5; Col. 6, L. 5-Col. 9, L. 17; and Col. 12, L. 13-52];

passing corrective data through the network via the bi-directional delivery protocol [Col. 6, L. 62-Col. 7, L. 6] and

performing error correction to reduce packet loss using checksums when multicasting said data [Col. 6, L. 5-Col. 9, L. 17];

wherein, said data comprises video data that is multicasted through the network [Col. 6, L. 5-Col. 9, L. 17; and Col. 12, L. 13-52]; and

wherein, said using said multicast protocol comprises sending a binomial TCP forward packet and a simple UDP backwards packet [figures 5, i.e. the delivery from broadcast node 70 to message layer 16 and data transmission

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layer 14 on the global network 12; and Col. 6, L. 5-Col. 9, L. 17; and Col. 12, L. 13-52].

Hales fails to teach multicasting said data through said network in real-time or near real-time using a bi-directional delivery protocol (BDP); and, said video data is multicasted in uncompressed form. However, Lahr, in the same field of endeavor having closely related objectivity, teaches multicasting said data through said network in real-time or near real-time using a bi-directional delivery protocol (BDP) (i.e. RTP/RTSP is a bi-directional protocol) [figure 8; Col. 8, L. 3-62; and Col. 12, L. 15-67]; and, said video data is multicasted in uncompressed form (i.e. live content which includes video and audio) [Col. 8, L. 3-62].

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Lahr's teachings of multicasting said data through said network in real-time or near real-time using a bi-directional delivery protocol (BDP); and, said video data is multicasted in uncompressed form, in the teachings of Hales in distributed video communications system, for the purpose of providing more efficient content (video and audio) delivery capability in the network.

6. Claim 2, Hales and Lahr disclose the invention substantially as claimed. teaches Hales further comprising:

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multicasting at least a portion of the data to a first destination machine (i.e. node A) [figure 1 & 5 & 15 (i.e. A1 is a portion of the video and audio data); Col. 6, L. 5-Col. 9, L. 17; and Col. 12, L. 13-52];

sending a signal to a checksum from the at least a portion of the data received at the first destination machine [figure 1 & 5 & 15 (i.e. A1 is a portion of the video and audio data); Col. 6, L. 5-Col. 9, L. 17; and Col. 12, L. 13-52].

- 7. Claim 3, Hales and Lahr disclose the invention substantially as claimed. Hales teaches wherein the data comprises live updates to a sporting event (i.e. sports channels) [Col. 12, L. 43-52].
- 8. Claim 4, Hales and Lahr disclose the invention substantially as claimed. Hales teaches further comprising:

receiving a checksum result at the first destination machine (i.e. node A) [Col. 6, L. 5-Col. 9, L. 17; and Col. 12, L. 13-52; and Col. 19, L. 34-Col. 21, L. 5]; and

determining a list of data packets that are missing from the at least a portion of the data received at the first destination machine using tile checksum result [figure 15; and Col. 6, L. 5-Col. 9, L. 17; and Col. 12, L. 13-52; and Col. 19, L. 34-Col. 21, L. 50].

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9. Claim 5, Hales and Lahr disclose the invention substantially as claimed. Hales teaches further comprising: further multicasting the data to a second destination machine (i.e. node B) [figure 5].

10. Claim 6, Hales and Lahr disclose the invention substantially as claimed. Hales teaches further comprising

multicasting the data through the network from the second destination machine (i.e. node B) [figure 1; and Col. 6, L. 5-Col. 9, L. 17]; and receiving the data at the destination machine (i.e. node A) [figure 1; and Col. 6, L. 5-Col. 9, L. 17].

11. Claim 7, Hales and Lahr are relied upon for the disclosure set forth in the previous rejection. Hales teaches further comprising:

using a multicast global listener (multicast GL) (i.e. network interface processor "listen") between the first and second destination machines to correct for packet loss [figure 1; Col. 8, L. 26-48];

wherein, the first destination machine sends the data to the second destination machine and the second destination machine sends the data to the first destination machine [figure 1; and Col. 8, L. 26-48].

12. Claim 9, Hales and Lahr disclose the invention substantially as claimed. Lahr teaches further comprising:

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performing a multi-client web browsing session [Col. 11, L. 34-Col. 13, L. 8];

wherein, a browser at the first destination machine is locked to a browser at the second destination machine and displays the same website as that displayed at the second destination machine [Col. 7, L. 20-34; and Col. 11, L. 34-Col. 13, L. 8].

- 13. Claim 10, Hales and Lahr disclose the invention substantially as claimed. Hales teaches wherein, the data includes audio data [Col. 7, L. 29-33].
- 14. Claim 11, Hales and Lahr disclose the invention substantially as claimed. Hales teaches wherein the audio data is uncompressed [Col. 7, L. 29-33].
- 15. Claim 13, Hales and Lahr disclose the invention substantially as claimed. Lahr teaches wherein: the network is a local area network or wide area network [figure 5D, LAN].
- 16. Claim 14, Hales and Lahr disclose the invention substantially as claimed. Lahr teaches wherein: the network is the internet or an intranet [figure 11, Internet 182].

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17. Claim 15, Hales and Lahr disclose the invention substantially as claimed. Lahr teaches wherein: tile network is a wireless network [figure 5D, wireless].

- 18. Claim 16, Hales and Lahr disclose the invention substantially as claimed. Lahr teaches wherein: the first destination machine is a wireless phone [figure 5D, wireless phone].
- 19. Claim 87, Hales and Lahr disclose the invention substantially as claimed. Hales teaches further comprising, using an email to multicast the video data [Col. 22, L. 30-45]; wherein, the email is converted for transmission without compression using the multicast GL [Col. 22, L. 30-45].
- 20. Claim 88, Hales and Lahr disclose the invention substantially as claimed. Hales teaches wherein the email comprising the video data is transmitted through the network using approximately 2Kb sized pieces of information (i.e. it is inherited from multicast protocol for video) [Col. 22, L. 30-45].
- 21. Claim 92, Hales and Lahr disclose the invention substantially as claimed. Lahr teaches wherein, the video data is uncompressed (i.e. live content which includes video and audio) [Col. 8, L. 3-62].

- 22. Claim 93, Hales and Lahr disclose the invention substantially as claimed. Lahr teaches wherein the network is a one-to-many network and the multicast stream is established from an outermost destination machine in the set of destination machines in the one-to-many network configuration [Col. 12, L. 49-67; and Col. 14, L. 8-22].
- 23. Claim 94, Hales and Lahr disclose the invention substantially as claimed. Lahr teaches wherein, the client machine sends the video data to an adjacent client machine and the adjacent client machine sends the data to the client machine to correct for packet loss in the one-to-many network configuration of video conferencing [Col. 12, L. 49-67; and Col. 13, L. 53-Col. 14, L. 22].
- 24. Claim 98, Hales and Lahr disclose the invention substantially as claimed. Lahr teaches wherein the second destination machine is a web TV system [figure 5D, set-top box include webTV].
- 25. Claim 99, Hales and Lahr disclose the invention substantially as claimed. Lahr teaches wherein the second destination machine is a computer [figure 5D, PC].
- 26. Claim 67 is corresponding claim of claims 1 and 3. Therefore, it is rejected under the same rationale.

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27. Claim 68 is corresponding claim of claims 3 and 16. Therefore, it is rejected under the same rationale.

- 28. Claim 69 is corresponding claim of claim 15. Therefore, it is rejected under the same rationale.
- 29. Claim 82 is corresponding machine-readable medium claim of method claims 1,2 and 4. Therefore, it is rejected under the same rationale.
- 30. Claims 84-86,90-91 are corresponding machine-readable medium claims of method claims 5,6,7,9,11. Therefore, they are rejected under the same rationale.
- 31. Claim 95 is corresponding method claim of machine-readable medium claims 82 and 84. Therefore, it is rejected under the same rationale.
- 32. Claims 96-97 are corresponding claims of claims 3,16. Therefore, they are rejected under the same rationale.
- 33. Claims 100-101 are corresponding method claims of machine-readable medium claims 91-92. Therefore, they are rejected under the same rationale.

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34. Claims 8,89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hales and Lahr as applied to claims 1, 82 above, and further in view of VanBuskirk et al. (VanBuskirk) (US 7,257,641).

35. Claim 8, Hales and Lahr are relied upon for the disclosure set forth in the previous rejection. Hales teaches the multicast global listener (multicast GL) (i.e. network interface processor "listen") between the first and second destination machines [figure 1; Col. 8, L. 26-48].

Hales and Lahr fails to teach the multicast GL is implemented in, one or more of, TAPI 3 and IGMPv3. However, Lahr, in the same field of endeavor having closely related objectivity, teaches the multicast GL is implemented in, one or more of, TAPI 3 and IGMPv3 [Col. 7, L. 24-49].

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated VanBuskirk's teachings of the multicast GL is implemented in, one or more of, TAPI 3 and IGMPv3, with Lahr's teachings of multicasting said data through said network in real-time or near real-time using a bi-directional delivery protocol (BDP) and said video data is multicasted in uncompressed form, in the teachings of Hales in distributed video communications system, for the purpose of providing more efficient content (video and audio) delivery capability in the network.

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36. Claim 89 is corresponding machine-readable medium claims of method claim 8.

Therefore, it is rejected under the same rationale.

- 37. Claim 83 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hales and Lahr as applied to claim 82 above, and further in view of Boivie (US 6,415,312).
- 38. Claim 83, Hales and Lahr are relied upon for the disclosure set forth in the previous rejection. Hales teaches performing error correction to reduce packet loss using checksums when multicasting said video and audio data [Col. 6, L. 5-Col. 9, L. 17]

Hales and Lahr fail to teach sending the signal to a plurality of checksum points; and requesting, from the plurality of checksum points, data packets that are missing from the at least the portion of the video and audio data received at the first destination machine. However, Boivie, in the same field of endeavor having closely related objectivity, teaches sending the signal to a plurality of checksum points (i.e. a plurality of checksum points considered as a plurality of intermediate nodes which doing checksum) [Col. 6, L. 54-Col. 7, L. 47]; and requesting, from the plurality of checksum points, data packets that are missing from the at least the portion of the video and audio data received at the first destination machine (i.e. the first intermediate node) [Col. 6, L. 54-Col. 7, L. 47].

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Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Boivie's teachings of sending the signal to a plurality of checksum points; and requesting, from the plurality of checksum points, data packets that are missing from the at least the portion of the video and audio data received at the first destination machine, with Lahr's teachings of multicasting said data through said network in real-time or near real-time using a bi-directional delivery protocol (BDP) and said video data is multicasted in uncompressed form, in the teachings of Hales in distributed video communications system, for the purpose of providing more efficient content (video and audio) delivery capability in the network.

Response to Arguments

Applicant's arguments filed 12/01/2009 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 1-11, 13-16, 67-69, 82-101 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH-CHAU NGUYEN whose telephone number is (571)272-4242. The examiner can normally be reached on 7AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VIVEK SRIVASTAVA can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. N./ Examiner, Art Unit 2445

/VIVEK SRIVASTAVA/

Supervisory Patent Examiner, Art Unit 2445